

Title (en)

Yarn slack eliminating device and spinning machine

Title (de)

Vorrichtung zur Beseitigung von Fadenlockerungen und Spinnmaschine

Title (fr)

Dispositif d'élimination du relâchement des fils et machine de filature

Publication

EP 2075359 B1 20120627 (EN)

Application

EP 08020198 A 20081119

Priority

JP 2007337974 A 20071227

Abstract (en)

[origin: EP2075359A2] An object of the present invention is to provide a yarn slack eliminating device that enables tension applied to a yarn to be controlled while a spinning machine is in operation. A yarn slack eliminating device 12 includes an electric motor 25, a yarn slack eliminating roller 21, a yarn hooking member 22, an electromagnet 36, and a control section 74. The yarn slack eliminating roller 21 is rotationally driven by the electric motor 25. The yarn hooking member 22 is concentrically attached to the yarn slack eliminating roller 21 so as to be rotatable relative to the yarn slack eliminating roller 21. The electromagnet 36 generates a magnetic field to be applied to the yarn hooking member 22. The control section allows the magnetic field to generate a resistance torque resisting the rotation of the yarn hooking member 22 relative to the yarn slack eliminating roller 21. The control section 74 also controls an input to the electromagnet 36 to control the resistance torque (Fig. 3).

IPC 8 full level

B65H 51/22 (2006.01); **D01H 4/48** (2006.01); **D01H 13/10** (2006.01)

CPC (source: CN EP)

B65H 51/22 (2013.01 - EP); **D01H 4/48** (2013.01 - CN EP); **D01H 13/10** (2013.01 - CN EP); **D01H 13/104** (2013.01 - EP); **D01H 13/108** (2013.01 - CN); **B65H 2701/31** (2013.01 - EP)

Cited by

CN103014934A; EP2284300A1; US9850090B2; EP2298971A1; EP2189557A1; EP2966020A1; CN105274662A; EP2365115A1; EP2987755A1; EP3611295A1; DE102018119164A1; CN110817573A; CZ303880B6; CN103628199A; EP2684827A3; US9403656B2; US9957646B2; EP3715294A1

Designated contracting state (EPC)

CH CZ DE LI TR

DOCDB simple family (publication)

EP 2075359 A2 20090701; **EP 2075359 A3 20110511**; **EP 2075359 B1 20120627**; CN 101469469 A 20090701; CN 104278372 A 20150114; CN 104278372 B 20170412; JP 2009155779 A 20090716

DOCDB simple family (application)

EP 08020198 A 20081119; CN 200810190224 A 20081226; CN 201410591868 A 20081226; JP 2007337974 A 20071227